

Promotion of Marine Education Implementation Project: Enhancing Taiwanese Citizens' Basic Knowledge and Literacy of the Ocean and Cultivating Quality Talent Needed by the Industries (Department of Planning)

To implement the goals and strategies proposed in the *White Paper on Marine Education Policy* announced in 2007, the Ministry of Education formulated and enforced the *Marine Education Implementation Project*. The project was divided into three phases, with each phase lasting for five years, to continuously and systematically implement marine education.

For the first and second phases of *Marine Education Implementation Project* (2007–2011 and 2012–2016, respectively), the specific content for implementation was planned according to eight major education dimensions, which are curriculum planning and design, teacher training, teaching innovation, equipment upgrading, development of student abilities, teaching result assessment or certification, promotional activities, and other complementary measures. Performance goals for these dimensions in each year were also set, and the two phases have been completed.

The third phase (2017–2021) involves three goals: (a) to complete the implementation mechanism for marine education in response to the need of regional characteristic development, (b) to enhance the basic knowledge of marine education and highlight the advantages of “people of the ocean,” and (c) to innovate the human resource development system for marine education by integrating school education with of the marine industry. Under these three goals and according to the three major strategies proposed in the *White Paper on Marine Education Policy* amended in 2017, namely enhancing the marine education implementation mechanism, strengthening the ocean literacy of the public, and improving the knowledge and competence of marine professionals, 12 key strategies, 35 measures, and 62 implementation items have been established for the third phase and will be implemented by the Ministry of Education in cooperation with relevant governmental agencies, local governments, schools at all levels, and the industries. Thus, the basic ocean knowledge, competence and literacy of Taiwanese citizens can be enhanced, and

talent required by the industries can be cultivated. The 12 key strategies are as follows:

1. Completing the marine education promotion system at all levels of educational administrative agencies.
2. Improving the resource integration and communication platform for marine education implementation.
3. Facilitating the sharing, exchange, and application of resources and information related to marine education.
4. Incorporating marine education into the textbooks of various learning areas in the 12-year compulsory education.
5. Improving marine education-related curriculum and instruction at all school levels.
6. Implementing the education for marine career exploration in accordance with the 12-year compulsory education and establishing mechanisms to assist students' progress to higher level education and employment.
7. Strengthening ocean-related promotion and helping parents and the public to build a positive attitude regarding marine occupations.
8. Integrating school education with social education, encouraging social education centers to hold activities related to marine education.
9. Improving curriculum content and teaching materials over time in accordance with marine technology development and ocean-related international conventions.
10. Understanding the international development trend of marine education and adjusting domestic human resource development projects for the marine industries accordingly.
11. Establishing complete marine education internship system in response to the development of marine industries, thereby reducing the gap between learning and practice.
12. Encouraging universities and colleges that have departments related to marine subjects to strengthen their research and development in such areas to support the development of emerging marine industries.